# DRAFT Rule-Making Criteria Documentation as required by the Administrative Procedures Act RCW 34.05

The Washington State Department of Ecology is proposing revisions to the state's surface water quality standards regulation, Chapter 173-201A WAC. This longstanding regulation sets the water quality goals for all of the surface waters in Washington. By establishing numerical limits on the allowable amount of pollution that can occur to the state's waters, the standards serve as the driver for designing control programs. The standards are controversial and it is crucial that they be set carefully to protect the instream uses (such as fish and wildlife habitat and recreation) without causing unnecessary costs of compliance. This goal requires a careful balancing between stringency, complexity, and protectiveness. Making this balancing act more challenging is that it must occur within the context of complying with state and federal laws and regulations that set directives for state water quality standards and the control programs that are used to implement those state standards.

This draft Administrative Procedures Act (APA) Chapter 34.05 RCW document is meant to be read in conjunction with the draft Environmental Impact Statement (DEIS) and the discussion documents for this rule. Normally the analysis in this document is prepared after the public comment period and prior to filing the Rule-making Order (CR-103) which formally adopts the new rule. Ecology is providing its thinking on these issues prior to filing formal adoption to help be clear about the analysis we have done in proposing the changes to the rule. This document contains a preliminary analysis because we have not formally collected public feedback on the rule proposal. Therefore, the final version of this APA material will be altered based on the public feedback and the required Concise Explanatory Statement that is prepared after public comment.

With the establishment of the state's Regulatory Reform Act Chapter 34.05 RCW, the state legislature set up a set of issues that state agencies must address to demonstrate that they have carefully weighed these important considerations before formally adopting or revising state regulations.

- 1. Clearly state the general goals and specific objectives of the statute that the rule implements.
- 2. Determine that the rule is needed to achieve the goals and objective of the specific statute, and analyze alternatives to rule making and the consequences of not adopting the rule.
- 3. Determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs.
- 4. Determine, after considering alternative versions of the rule and the analysis above, that the rule being adopted is the least burdensome alternative for those required to comply with it.
- 5. Determine that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.
- 6. Determine that the rule does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.
- 7. Determine if the rule differs from any federal regulation or statue applicable to the same activity or subject matter and, if so, determine that the difference is justified.

These issues are required to be answered prior to final rule adoption. Ecology is providing its preliminary thinking on these issues prior to rule adoption to help be clear about the analysis we have done in proposing the changes to the rule.

#### **Background Overview:**

As identified in Washington's Water Pollution Control Act Chapter 90.48, RCW, the goal for this rulemaking and for future Water Quality Standards rulemaking are to: "maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and public enjoyment thereof, the propagation and protection of wild life, birds, game, fish and other aquatic life, and the industrial development of the state, and to that end require the use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the state of Washington."

Under federal regulations (Title 40 CFR Part 131.20), states are to establish water quality standards that meet the requirements of the federal Clean Water Act. States are from time to time, but at least once every three years, required to consider making changes to their standards to:

- Incorporate new science;
- Consider where changes could be made to better meet federal laws and regulations; and
- Consider the incorporation of new guidance from the US Environmental Protection Agency.

The changes being considered by Ecology at this time include all three of these elements. These proposed changes to the rules have been developed over a significant period of time. and have resulted in three distinctly narrow options. It is important to note that the three alternatives analyzed in this document and the draft DEIS do not cover the wide spectrum that could meet the goals of the CWA, but are options that have been narrowed down through extensive and intensive public feedback over the last ten years.

The current rule revision process began in 1992 with an outreach process that was designed to ask the questions:

- Are there any changes that should be made to the surface water quality standards?
- And if so, which changes appear to be the most important at this time?

Using this feedback, Ecology chose several very important topics to review for possible changes to the regulations. Some of those changes were made in the 1997 update to the standards. The remaining issues that are being incorporated in this revision are:

- 1. Reformatting fresh water from class based standards to use based standards;
- 2. Creating an implementation plan for the state's water quality antidegradation policy;
- 3. Revising criteria for temperature and adding new aquatic life uses for char (bull trout and Dolly Vardon);
- 4. Revising criteria for dissolved oxygen, bacteria and ammonia;
- 5. Developing criteria to protect water for agriculture supply.

There was also significant feedback about rule clarity and the need for more information on implementing the regulations. Based on that ongoing feedback we are establishing clarity and detail on how to implement the regulations (such as language that references federal language on use

attainability analysis, variances, site specific criteria) and providing clear provisions for the use of compliance schedule when conditionally approving the effects of hydropower dams in the state.

# 1- Clearly state the general goals and specific objectives of the statute that the rule implements.

#### CHAPTER 90.48 RCW WATER POLLUTION CONTROL

#### RCW 90.48.010

#### Policy enunciated.

It is declared to be the public policy of the state of Washington to maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and public enjoyment thereof, the propagation and protection of wild life, birds, game, fish and other aquatic life, and the industrial development of the state, and to that end require the use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the state of Washington. Consistent with this policy, the state of Washington will exercise its powers, as fully and as effectively as possible, to retain and secure high quality for all waters of the state. The state of Washington in recognition of the federal government's interest in the quality of the navigable waters of the United States, of which certain portions thereof are within the jurisdictional limits of this state, proclaims a public policy of working cooperatively with the federal government in a joint effort to extinguish the sources of water quality degradation, while at the same time preserving and vigorously exercising state powers to insure that present and future standards of water quality within the state shall be determined by the citizenry, through and by the efforts of state government, of the state of Washington.

#### RCW 90.48.035

#### Rule-making authority.

The department shall have the authority to, and shall promulgate, amend, or rescind such rules and regulations as it shall deem necessary to carry out the provisions of this chapter, including but not limited to rules and regulations relating to standards of quality for waters of the state and for substances discharged therein in order to maintain the highest possible standards of all waters of the state in accordance with the public policy as declared in RCW 90.48.010.

#### WATER RESOURCES ACT OF 1971

#### RCW 90.54.020

General declaration of fundamentals for utilization and management of waters of the state. (b) Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry. Notwithstanding that standards of quality established for the waters of the state would not be violated, wastes and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except in those situations where it is clear that overriding considerations of the public interest will be served.

# 2- Determine that the rule is needed to achieve the goals and objective of the specific statute, and analyze alternatives to rule making and the consequences of not adopting the rule.

- The Administrative Procedures Act RCW 34.05 defines what constitutes a rule. The term "rule" under RCW 34.05.010(16) includes "any agency order, directive, or regulation of general applicability (a) the violation of which subjects a person to a penalty or administrative sanction;" and "the term includes the amendment or repeal of a prior rule."
- Under Chapter 90.48 RCW the Water Pollution Control Act, the state is required to "maintain the highest possible standards to insure the purity of all waters of the state". The proposed changes to the rule incorporate new science and federal guidance to protect beneficial uses and to insure the purity of Washington's waters.

Under federal regulations (Title 40 CFR Part 131), states are to establish water quality standards that meet the requirements of the federal Clean Water Act. States are from time to time, but at least once every three years, required to consider making changes to their standards to:

Incorporate new science;

Consider where changes could be made to better meet federal laws and regulations; and Consider the incorporation of new guidance from the US Environmental Protection Agency.

The changes being considered by Ecology at this time include all three of these elements. If the Agency were to not adopt these rules then we would not be meeting the policy objective of maintaining the highest possible standards of all waters of the state in accordance with the public policy as declared in RCW 90.48.010.

- Chapter 90.48 RCW the Water Pollution Control Act also requires Washington to "insure that present and future standards of water quality within the state shall be determined by the citizenry, through and by the efforts of state government, of the state of Washington". The procedure for adopting rule changes in Washington are governed by the Administrative Procedures Act and require agencies to go through a very prescriptive process for making sure citizens have an opportunity to provide input. The purpose of the rule-making procedures is to ensure that members of the public can participate meaningfully in the development of agency rules which affect them. Not only do we think that these changes need to be placed in rule to ensure uniform requirements but we also think the rule development process will make sure that we meet the other intent of the statute which is to provide a formal opportunity for the public to engage in this process.
- The state's surface water quality standards set limits on pollution in our lakes, rivers and marine waters in order to protect water quality. The Clean Water Act requires that the water quality standards protect beneficial uses, such as swimming, fishing, aquatic life habitat, and agricultural and drinking water supplies. The water quality standards are the foundation for other water quality programs such as waste water permits, water clean-up plans (also known as TMDLs), and for designating the polluted water bodies on Washington's 303(d) list.

In Washington, if an agency knows what it will require of regulated entities and those requirements will not be determined on a case-by-case basis, it is expected that the state agency adopt those

requirements by rule, and not put them in guidance. This is to ensure that such requirements are not used just as a regulatory requirement would, without having been subjected to the critical public involvement procedures and oversight that a regulation mandates. Since these proposed changes will govern permit requirements, the determination of impaired water bodies and the clean up levels for water bodies, it was determined that these changes need to go into rules instead of being placed in a guidance document.

# 3 - Determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs.

The draft Cost Benefit Analysis is required to be done prior to rule adoption. As with all of the material for this rule effort, it is important to allow public review of this part of the analysis prior to rule adoption. Currently the draft Cost Benefit Analysis is not available but we will allow public review of the Cost Benefit Analysis prior to final rule adoption. We will notify interested stakeholders of its availability through our Water Quality Standards List Serve. This will be available for public comment by the end of March 2003.

# 4 - Determine, after considering alternative versions of the rule and the analysis above, that the rule being adopted is the least burdensome alternative for those required to comply with it.

This section of the draft APA document will look at the alternatives that are proposed in the draft DEIS. Refer to the DEIS for a description of the proposal. The final determination on Least Burdensome will be made once the Concise Explanatory Statement is completed and prior to final adoption. The Concise Explanatory Statement is the response to comments received during the formal public review process. The final least burdensome determination will be made based on the public feedback gathered during the formal review period and the goal of this rule writing effort.

In developing the recommendations for water quality standards, it has become apparent that there are two different types of burden and while each creates economic and social costs, they can often be at odds with one another. These two types of burden are represented by the rule's **stringency** and the rule's **complexity**. In developing recommended changes for the state water quality standards, Ecology has come to recognize that it can establish requirements that are less stringent by making the criteria more complex. This occurs by adding more elements to the requirements that will recognize specific situations. While on the surface it would seem to be easy to just make criteria as precise in their application as possible, doing so creates an increased demand for site-specific and activity-specific information to implement the more complex criteria. The three alternatives analyzed were developed over the lengthy rule development process. This process has included significant work with a variety of interest groups which helped focus and narrow the range of options that are presented. The water quality standards must be approved by the United States Environmental Protection Agency, and the federal fish agencies have indicated that they will do an Endangered Species Act consultation on the rule after it is adopted. After looking at these options, we think our draft proposal includes the least burdensome alternative but will rely on public feedback prior to making the final determination as required under RCW 34.05.

**Stringency** – Tougher, more demanding analysis or criteria to meet. More stringent permit

requirements, more listed waterbodies, more TMDLs.

**Complexity** – More analysis, site-specific information and data needed to make decisions. Delay the burden of dealing with more complex issues for future generations.

Long term vs. Short Term cost to society – Putting off decisions for future generations to deal with

The Water Quality Standards establish minimum requirements for the quality of water that must be maintained in lakes, rivers, streams, and marine waters. This is done to ensure that all the beneficial uses associated with these waterbodies are protected. The standards are used in the following ways that have the potential to place burden on the regulated community:

- 1. They affect the requirements and effluent limits that are placed in NPDES permits. These requirements can be effluent limits based on the numeric criteria or implementation requirements such as the language on implementing the Tier II analysis. The more stringent the criteria numbers or implementation language is the more work for the regulated community
- 2. The water quality standards are used to define what water bodies in the state are impaired and need a water cleanup plan (TMDL). Waters defined as impaired are placed on the 303(d) list of polluted waterbodies. In addition to needing water cleanup plans, the amount of pollutant(s) allowed to be released into these waterbodies is severely restricted once they are placed on the impaired waterbodies list.
- 3. Water Quality Standards set the level of clean up needed for a waterbody. Once the waterbody meets the Water Quality Standards it can be removed from the impaired waterbodies list. These clean ups or TMDLS define the amount of pollution that needs to be reduced from point and nonpoint sources. The standards are critical to defining how much pollution is allowed and still protect beneficial uses.

There are a number of items that have been included in this rule to mitigate the impacts on the regulated community. These include:

- The antidegradation section that requires a more detailed analysis from applicants of water quality
  permits discharging to clean water bodies is limited to new and expanded actions that have a
  measurable change in water quality. This limitation assures that resources are spent on those
  actions that will cause a measurable change, and therefore not require resources to be used on
  insignificant actions.
- The revised temperature and dissolved oxygen criteria have been designed to avoid unnecessary impact on human economic activities and to allow for reasonable implementation. Revisions include:
  - (a) Selecting criteria from the midpoint of the range that bounds the estimate of what maximum temperatures or dissolved oxygen are needed to fully protect species,
  - (b) Applying the criteria based on general patterns of stream use and species mixes,
  - (c) Not basing recommendations on individual studies showing sensitive outcomes, and
  - (d) Recognizing longer-term averaging periods where appropriate when developing the recommended criteria.

- (e) Where natural conditions of a waterbody do not meet the criteria, a small allowance for human activities is allowed to be factored in to permits and pollution reduction plans.
- (f) An allowance that criteria can be adjusted to account for the thermal effects of permanent human structural changes.
- (g) Alternative language that allows waterbodies to only have to meet the criteria nine years out of ten. This exemption can be used in situations when temperatures or dissolved oxygen levels are naturally exceeded from extreme climatic years, and will make permitting or modeling more accurate and effective.
- Allows for general permits and pollution control programs to go through an antidegradation analysis at the time the permit is developed and not for each individual action covered by the general permit or pollution control program. Since many activities may be covered by general permits or programs, this will be a savings in terms of not having to provide individual analyses.
- Added a new part in the proposed rule to provide several tools that are available for applying alternative criteria or uses. These new tools include provisions for:
  - (a) 173-201A-410: Allows on-going short-term modifications of water quality. The amendment moves the longer duration short term modification from pesticides to its own subsection that can apply to any short term activity. Thus the flexibility is more broadly provided.
  - (b) 173-201A-420: Variances allow criteria to be modified for individual facilities, or stretches of waters on a longer term basis.
  - (c) 173-201A-430: Site specific criteria may be developed after determining that the criteria designated for a waterbody cannot be attained due in part or whole to natural climatic or landscape attributes, or irreversible human changes.
  - (d) 173-201A-440: A use attainability analysis may be done to remove a designated use for a waterbody that is neither existing nor attainable.
  - (e) 173-201A-450: A water quality offset occurs where a project proponent implements or finances the implementation of controls for point or nonpoint sources otherwise under the control of other entities to reduce the levels of pollution for the expressed purpose of creating sufficient assimilative capacity to allow new or expanded discharges. The goal of water quality offsets is to reduce the pollution levels of a waterbody sufficiently enough that a proponent's actions are not causing or further contributing to a violation of the requirements of this chapter and result in a net environmental benefit.

## **REFORMAT**

Reformat Fresh Water from Class Based Standards to Use Based Standards (change in format will not affect marine waters)

See page 25 of the DEIS for more information	The proposal is to organize the freshwater standards by uses that are protected (aquatic life, recreation, water supply)	The current standards are organized by classes (AA, A, B); there are designated uses assigned to each class
Stringency	The change from class-based to use-based will not change designated uses that are already assigned to waters. But it will provide interested parties more flexibility to change listed uses to reflect what actually exists and is attainable in a specific water body.  Uses will be assigned individually and independently.  This switch will allow interested groups to (over time) propose changes that more accurately reflect the appropriate beneficial uses.	The current "class-based" system for fresh waters contains 4 classes (AA, A, B, Lake) and lists certain beneficial uses that are assumed to occur in each of those classes. This grouping makes it difficult to tailor requirements for a particular water body when a use does not exist. The grouping of beneficial uses makes it difficult to remove uses that do not exist.
Complexity	The use based system will give Washington more flexibility to change listed uses to reflect what actually exists and is attainable in a specific waterbody.	It is complex and very difficult in the class system to remove a use when/where it is clear the use does not nor ever has existed. Since the classes entail multiple beneficial uses the analysis needs to show these beneficial uses do not exist.
Long term vs. Short Term benefits to society	The use based system will allow the correct criteria (the one that protects the use) to apply to the correct waterbody. This is done through future rule making and requires EPA approval.	The current format has acknowledged problems where criteria are applied inappropriately. Based on the current structure some of those changes cannot be made easily when it appears there is a legitimate problem.

## **ANTIDEGRADATION**

1. Analysis for degrading waters that are above water quality standards (Tier II)

See page 30 of the DEIS for description of alternatives	The proposed alternative is to limit the activities that would undergo an antidegradation alternatives analysis based on (1) the type of activity and (2) the amount of pollution produced by the activity.	The existing antidegradation policy does not contain any details regarding the antidegradation alternatives analysis. The existing language leaves open to agency judgment what types of activities would need to comply with Tier II.	The alternative with a lower environmental impact would be to require all new or expanded activities to undergo an antidegradation analysis.
Stringency	This would require only permitted activities with a measurable impact on the water quality to go through this analysis.  This would only apply to those permitees requesting water quality program coverage or assurance.	The current rules are unclear so it is not applied consistently. Therefore, it could be more or less stringent based on when and how it gets applied.	This could mean that a larger and more varied set of permit applications and decisions outside Ecology and outside the Water Quality Program (SEPA determinations, Shoreline permits, and water rights) would be required to go through Tier II analysis.
Complexity	There is a clear definition on what activities get analyzed as well as what permits and activities this applies to.  Permitees with a measurable discharge would need to provide information regarding the ambient water quality and whether their discharge would be a measurable increase.	It is currently not clear which activities that degrade water quality go through this analysis. There is inconsistent application or no application.  If not placed in rules then Ecology will be required to develop guidance for how to implement.	Other programs, governments and agencies would have to do an antidegredation analysis on a very broad range of projects that might degrade water quality. They would need to be provided guidance to do this without any resources. Project applicants would have to understand the antidegredation analysis.
Long term vs. Short Term benefits to	A focus on measurable activities required to obtain Water Quality	If antidegredation is applied then it provides a long term benefit to	A more inclusive analysis of all polluting activities in Washington

society	approval will allow resources to be	ا ع	will provide long term benefits.
	placed on activities which have a	to reduce the amount of pollutants	These benefits will only be realized if
	high likelihood of degrading clean	going into the water.	all regulatory agencies/programs
	water bodies.		actually require permitees to go
			through this analysis.

## 2. Designation of Outstanding Resource Waters (Tier III)

See page 36 of the DEIS for description of alternatives	In the proposed alternative, water bodies can be designated as Tier III waters by following a procedure that includes scientific, economic, social factors and level of support from citizens and governments. Water bodies would be designated by name in a revised rule through the APA process.	The existing standards contain little information on designating Tier III waters. Water bodies would be designated by name through the APA process.	An alternative with a lower environmental impact would be to add a category in addition to Tier III that would capture water bodies that were between Tier II and Tier III. They would have less eligibility requirements but would still have to be designated in a revised rule through the APA process.
Stringency	Few water bodies will be likely to qualify and receive this level of protection since it applies to waters that are relatively pristine.  Water bodies will not be designated Tier III if doing so will cause economic and social costs to the state and surrounding communities.	The language is vague so it could be implemented in a more or less stringent manner.	Also, see evaluation for proposed alternative.  More waters will qualify for protection if Tier II ½ is included.
Complexity	Few water bodies will qualify for just the Tier III. The process for designating Tier III specifically includes broad	The language is vague so how it would be implemented could be more or less complex.	More waters will qualify for a certain level of protection if Tier II ½ is included. Any dischargers would have to do an analysis to show that

	support by a number of interests, which could be considered more complex.	If not placed in rules then Ecology will be required to develop guidance for how to	receiving waters would not have a measurable affect on water quality.
	Designation of any of these waters will require a formal rule	implement.  Designation of any of these waters will require a formal rule	The communities around these waterbodies will be limited in the types of activities allowed.
	change.	change.	Designation of any of these waters (Tier II ½ or III) will require a formal rule change.
Long term vs. Short	Few waterbodies will qualify for	There is not a clear consistent	The inclusion of Tier II ½ will
Term benefit to society	designation but the water bodies that do qualify will have a high likelihood of remaining pristine.	process to go through to designate as Tier III. This has resulted in no waters being protected as Tier III.	provide more opportunity to protect a number of waters from increased pollution. These will probably be water bodies that just fall short of the Tier III requirements.  The inclusion of this option will likely result in more waters being protected under Tier II <sup>1</sup> / <sub>2</sub> than just having a Tier III designation.

## **TEMPERATURE**

1. Adding spawning and rearing life stages for char (bull trout) as a beneficial use

See page 48 of the DEIS for description of alternatives	The proposed alternative uses a single, year-round criterion (13°C 7-DADMax) to protect both rearing and spawning (spawning). It does not establish separate spawning (spawning) criteria for char.	The existing criteria (16°C for Class AA and 18°C for Class A, one-day maximums) also apply year-round. The existing criteria do not specifically designate char as a subcategory of aquatic life.	The alternative with a lower environmental impact is to adopt criteria to specifically protect spawning (spawning) where and when it occurs: 7.5°C 7-DADMax – Spawning (spawning) of char (when it occurs) and 13°C 7-DADMax -Rearing of char (rest of the year)
Stringency	13°C will be more protective than the current regulations.  This will potentially result in more waterbodies being listed and needing TMDLs.  The actual requirements to meet the current standards and load allocations for nonpoint TMDLs will probably not be different from what it takes to meet the current rules.  More point source permits might need to start having temperature requirements.	The temperature requirements for waterbodies that have char use are 16°C –one-day maximum and 18°C. These temperatures were not set to protect char.  Not protecting a use that exists, especially one that is a concern under the Endangered Species Act will raise the likelihood of federal agencies setting the criteria they support.	The spawning number of 7.5 C is a significantly more stringent number. This will result in more waterbodies being placed on 303(d), which will mean more TMDLs in areas of the state that might not have a way to get the water to meet this temperature.  This will potentially result in more waterbodies being listed and needing TMDLs.  The actual requirements to meet the current standards and load allocations for nonpoint TMDLs will probably not be different from what it takes to meet the current rules.  More point source permits might need to start having temperature requirements.

Complexity	One number is less complex and easier to work with in permitting and TMDL development. This will allow simpler permit requirements and Waste Load allocations.  Do not need to identify spawning seasons and areas.	Not protecting for a use that exists might make approval of the Washington standards by EPA more difficult and could result in EPA setting federal criteria.	Using 2 numbers in a permit, for developing TMDLs and monitoring is inherently more complex than using one. This makes permits and load allocations in TMDLs more complex.  Determining the correct dates for the spawning period is also complex and will result in different times for different waterbodies across the state.
Long term vs. Short Term benefits to society	This option provides clear temperature criteria for protecting Char.	Current rules provide no protection for Char.	This option provides clear temperature criteria for protecting Char at all life stages.

2. Char Criteria – Protection of Migratory Char

See page 52 of the DEIS for description of alternatives	The proposed alternative is to rely on the salmon, steelhead and trout criterion of 16°C as a 7-DADMax to protect migratory char.	The existing criteria are not designed to protect char.  Most char migration waters would be Class AA (16°C one-day maximum) or Class A	The alternative with a lower environmental impact would be to protect migratory char in water bodies used for the entire summer. 7-DADMax of 14°C.
Stringency	More stringent than the criteria for Class A waters.  This will potentially result in more Class A waterbodies being listed and needing TMDLs.  The actual requirements to meet the current standards and load allocations for nonpoint TMDLs will probably not be different from what it takes to meet the	(18°C one-day maximum).  The temperature requirements for waterbodies that have Char use are Class AA (16°C one-day maximum) or Class A (18°C one-day maximum).	More stringent than current level of protection. Will result in more Class A and ClassAA listed waterbodies and more TMDLs.  The actual requirements to meet the current standards and load allocations for nonpoint TMDLs will probably not be different from what it takes to meet the current rules.

	current rules.		
Complexity	Not more complex than what is currently in the standards.	Not protecting for a use that we know exists might make approval of the Washington standards by EPA more difficult and could result in EPA setting federal criteria.	The establishment of water bodies that migratory char use would be difficult to determine. Currently there is little data. Setting the time for when this number would be used will be difficult. This would also mean another temperature number to factor into TMDL, permit development and monitoring.
Long term vs. Short	Relying on the salmon number	Current rules provide no specific	Since there is little data it would be
Term cost to society	is a good way to provide for	protection for Char.	hard to say that establishing this
	protection.		number would be sustainable.

3. Salmon, Steelhead and Trout Criteria – Spawning and Rearing Life-Stages

See page 56 of the DEIS	The proposed alternative uses	The existing criteria (16°C for	The alternative with a lower
for description of	a single, year-round criterion	Class AA and 18°C for Class	environmental impact is to adopt
alternatives	(16°C 7-DADMax) to protect	A, one-day maximums) apply	criteria to protect spawning where
	both rearing and spawning. It	year-round.	and when it occurs: 13°C 7-
	does not establish separate		DADMax for spawning (when it
	spawning criteria.		occurs) and 17°C 7-DADMax for
			rearing (rest of the year).
Stringency	16°C 7-DADMax will be more	The temperature requirements	The spawning number of 13°C is
	stringent than the current	for waterbodies that have	more stringent than the current water
	regulations for Class A waters,	Salmon, Steelhead and Trout	quality standards for waterbodies that
	but less stringent than class AA.	spawning use are 16°C one day	will be required to protect this
		maximum in Class AA and 18°C	beneficial use.
	This will potentially result in	in Class A.	
	more Class A waterbodies being		This will result in more Class A and
	listed and needing TMDLs.		Class AA waterbodies being placed
			on 303(d) which will mean more
	The actual requirements to meet		TMDLs in areas of the state that
	the current standards and load		might not have a way to get the water
	allocations for nonpoint TMDLs		to meet this temperature.

	will probably not be different from what it takes to meet the current rules.		17°C is less stringent for Class AA waters. 13°C is more stringent for both Class A and Class AA waterbodies.
Complexity	One number is less complex and easier to work with in permitting TMDL development and monitoring.	These numbers are currently being implemented. Some interests think that they do not protect this beneficial use. Federal agencies could overfile on our standards if they think that Washington is not adequately protecting this beneficial use.	Using 2 numbers in a permit, for developing TMDLs and monitoring is inherently more complex than using one.  Determining the correct dates for the spawning period is also complex and controversial and will result in different criteria applying at different times in different waterbodies across the state.
Long term vs. Short Term cost to society	These criteria, as long as they are met, would provide long term benefits to fish.	Current standards for Class AA  – 16°C are sustainable for salmon populations. The current Class A criteria are not protective according to the literature.	These criteria, as long as they are met, would provide long term benefits to fish.

## **Dissolved Oxygen Criteria**

See page 62 of the DEIS for description of alternatives	a year-round criterion (9.5 mg/L 90-day average of the daily minimums and 7.0 mg/L one-day minimum) to protect both rearing and spawning (spawning). It does not	The existing criteria (9.5 mg/L for Class AA and 8.0 mg/L for Class A, one-day minimums) apply year-round.	The alternative with a lower environmental impact is to adopt criteria (90-day averages of the daily minimums) to specifically protect spawning (spawning) where and when it occurs: 10.5 mg/L for spawning (spawning) (when it
	establish separate spawning		occurs) and 8.5 mg/L for rearing

	(spawning) criteria.		(rest of the year). It also includes the 7.0 mg/l one day minimum.
Stringency	The one-day minimums are less stringent than the current	The dissolved oxygen requirements are one day minimums for Class AA –	The one-day minimums are less stringent than the current requirements.
	requirements.  The addition of 90-day averages could be a more stringent criteria	9.5mg/l and Class A 8.0.  This could be more restrictive if there were monthly analysis that	The 90-day averages are more stringent than the proposed alternative.
	depending on the values being averaged.	showed the single day minimum got down to 8 in a Class AA stream.	The addition of 2 separate 90-day averages are usually more stringent than just the one day.
Complexity	Using 2 numbers in a permit, for developing TMDLs and monitoring is inherently more complex than using one.	These numbers are currently implemented and only rely on one metric.	This alternative will require 3 different values to be used for TMDLs, permit modeling and water quality monitoring.  Determining the correct dates for the spawning period is also complex and controversial and will result in different criteria applying at different times in different waterbodies across the state.
Long term vs. Short Term cost to society	The addition of the 90-day average ensures that long-term healthy levels of oxygen are present for fish.	The one-day minimum does not provide necessary insurance for protection of a healthy oxygen environment.	The addition of the 90-day average ensures that long-term healthy levels of oxygen are present for fish.  Setting oxygen criteria specifically for spawning times would provide an additional level of protection.

## **BACTERIA**

**Selecting Numeric Criteria for Freshwater and Marine Water** 

See page 68 of the DEIS for description of alternatives	The proposed alternative:  -Freshwater  Primary Contact - E. coli at 100 cfu/100ml.  Secondary Contact - E. coli at 200 cfu/100ml.  -Marine Water  Shellfish Harvesting and Primary Contact - fecal coliform at 14 cfu/100ml Where shellfish is not a use enterococci at 35/100ml Secondary Contact enterococci at 70 cfu/100ml.	The existing criteria:  -Freshwater  Primary Contact fecal coliform at 50 cfu/100ml (Class AA) and 100 cfu/100ml (Class A)  Secondary Contact fecal coliform at 200 cfu/100ml (Class B)  -Marine Water Shellfish Harvesting and Primary Contact fecal coliform at 14 cfu/100ml. Secondary Contact. fecal coliform at 100 cfu/100ml (Class B) and 200 cfu/100ml (Class C).	The alternative with a lower environmental impact is to have the same as the proposed but eliminate all secondary contact.
Stringency	-Freshwater The E.coli number is similar to the requirements in place for Class A and B waterbodies. It is less stringent for Class AA waterbodies.  -Marine Water Where there are shellfish the criteria will stay the same.	Current requirements are more stringent for Class AA waters.	Same stringency as proposed alternative for primary contact.  Would be more stringent for water bodies that currently protect for secondary contact.
Complexity	Relies on 3 different indicator organisms to determine water	EPA is requiring states to change to <i>E.coli</i> and enterococci	Relies on 3 different indicator organisms to determine water quality

	quality for bacteria. This will make permits, monitoring and TMDLs more complicated.	so not changing will possibly put EPA in a position of not approving our rules and setting federal criteria.	for bacteria. This will make permits, TMDLs and monitoring more complicated.
		Staying with fecal removes the complexity of making the transition from <i>E.coli</i> and enterococci.	
Long term vs. Short	This alternative will provide less	The current regulations are	This alternative will provide less
Term cost to society	long-term protection for water bodies that were class AA.	simpler and provide more protection in class AA water bodies.	long-term protection for water bodies that were class AA.
			It will provide more long-term protection by not allowing secondary contact.

## SELECTION OF NUMERIC CRITERIA FOR AMMONIA.

See page 75 of the DEIS for description of alternatives	The proposal is to use existing chronic criteria for waters with salmonids. Use the EPA 1999 update criteria for other situations.	The lower environmental alternative is to use existing ammonia criteria in all situations.
Stringency	This alternative is less stringent than existing regulations.	Current regulations for ammonia are more stringent than the EPA guidance.
Complexity	The proposed modification also results in highly complex criteria that are expressed as an equation. Site specific information on temperature and pH of the water is needed to calculate the criteria. There are different criteria for waters with or without salmonids, and for waters with or without early-life stages of fish present.	The existing criteria for ammonia are highly complex. They are expressed as an equation, and site-specific information on temperature and pH of the water is needed to calculate the criteria. There are different criteria for waters with salmonids and waters without salmonids.
Long term vs. Short	The proposed criteria will provide protection for	The existing criteria will provide protection for

Term cost to society	aquatic life in Washington. Although the revisions	aquatic life in Washington, and maintain the current
	make the criteria less stringent, they will likely not	level of performance required of facilities emitting
	substantially change requirements for facilities	ammonia.
	discharging ammonia.	

## CRITERIA TO PROTECT AGRICULTURE WATER

See page 78 of the DEIS for description of alternatives	Adopt numeric criteria for electrical conductivity, bicarbonate, total suspended solids and pH to protect agricultural water supply.	The existing criteria have narrative criteria but no numeric.	Adopt numeric criteria for electrical conductivity, bicarbonate, total suspended solids and pH that are more protective than the criteria in the proposed alternative.
Stringency	This will add new water quality criteria for determining whether the beneficial use of agriculture water supply is being protected.  The addition of these criteria mean that waterbodies that do not meet these new criteria could be listed as impaired and will require TMDLs.  Could also mean that point source dischargers will need to make sure their effluent does not violate these criteria in the waterway.	Current regulations do not have specific numeric criteria to protect agricultural water supply. Only narrative criteria exist to protect agricultural water.	This will add more protective than proposed new water quality criteria for determining whether the beneficial use of agriculture water supply is being protected.  The addition of these criteria mean that water bodies that do not meet these new criteria could be listed as impaired and will require TMDLs.  Could also mean that point source dischargers will need to make sure their effluent does not impact these criteria in the waterway.
Complexity	The development of permits in these areas may need to include these new criteria.	Current regulations do not provide specific numeric criteria to protect for agricultural water supply.	The development of permits in these areas may need to include these new criteria.

	Water quality monitoring programs will need to add these parameters.		Water quality monitoring programs will need to add these criteria.
Long term vs. Short	These criteria were developed to	Does not provide for this	These criteria would provide a higher
Term cost to society	protect agriculture lands and	protection.	level, than proposed, of protection
	equipment.		for agriculture lands and equipment.

#### COMPLIANCE SCHEDULES TO ADDRESS LISCENSES OF EXISTING HYDROPOWER DAMS

See page 82 of the DEIS for description of alternatives	The proposed alternative allows for compliance schedules for dams to be used in 401 certifications if they endeavor to meet standards.	The language in the existing standards on compliance schedules is not clear about whether compliance schedules are acceptable.	Require all dams to fully comply with water quality standards before the certifications are issued.
Stringency	Would clearly explain the compliance schedule timeframes and deliverables.	Current regulations do not specifically discuss allowing compliance schedules. Individual compliance schedules are negotiated in consent agreements.	Extremely stringent especially since most large dams do have water quality impacts that are difficult to address.
Complexity	The requirements for a compliance schedule would clearly identify what analysis is required to offer a compliance schedule for existing dams.	Current regulations do not specifically discuss allowing compliance schedules. It takes significant work and time to negotiate individual compliance schedules.	This would provide clarity for the agency and dam operators on how to deal with 401 certifications.
Long term vs. Short Term cost to society	Assures that dams will have to do all that they can to meet standards.	Current rules put a burden on agencies to negotiate complex agreements because many large dams do not meet criteria. Significant resources are spent on how to issue certification.	For dams that do not meet water quality standards, Ecology will not issue 401 certifications, which will affect a dam's ability to get their FERC licenses.

# 5. Determine that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.

This longstanding regulation sets the water quality goals for all of the surface waters in Washington. By establishing numerical limits on the allowable amount of pollution that can occur to the state's waters, the standards serve as the driver for designing control programs. These rules do not require anybody to take an action that violates federal or state law.

# 6. Determine that the rule does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.

This longstanding regulation sets the water quality goals for all of the surface waters in Washington. By establishing numerical limits on the allowable amount of pollution that can occur to the state's waters, the standards serve as the driver for designing control programs that pertain to the regulated community and those that are not regulated but contribute to nonpoint pollution. These rules do not impose more stringent requirements on public or private entities.

# 7 - Determine if the rule differs from any federal regulation or statue applicable to the same activity or subject matter and, if so, determine that the difference is justified.

Federal requirements for water quality standards are found in federal laws and federal regulations. The key federal law that standards' implement is the federal Clean Water Act. Title 40 of the Code of Federal Regulations, particularly Part 131 (40 CFR Part 131). The United States Environmental Protection Agency (USEPA) also establishes guidance for implementing the federal regulations. See attached Chart that provides a crosswalk from current standards to the draft rule and the federal requirement.

Current Standards 9/97	Proposed Standards	Federal Requirement
<u>173-201A-010</u> Introduction.	<u>173-201A-010</u> Purpose.	CFR 131.2
	Modified	
173-201A-020 Definitions.	<u>173-201A-020</u> Definitions.	Not required.
	Modified	
173-201A-030 General water use	173-201A-200 Fresh water designated uses and	
and criteria classes.	criteria.	CFR 131.10-Designated uses
	173-201A-210 Marine Water Designated Uses	CFR 131.11-Criteria
	and Criteria	
	Modified	

Fecal coliform for fresh & marine waters: 030(1)(c)(i) (A)(B) 030(2)(c)(i)(A)(B) 030(3)(c)(i)(A)(B) 030(4)(c)(i) 030(5)(c)(i)	Bacteria: Fresh water 200(2)(b) Marine water 210(2)(b)	2002 EPA Federal Guidance on Bacteria
Dissolved Oxygen-Fresh 030(1)(c)(ii)(A) 030(2)(c)(ii)(A) 030(3)(c)(ii)(A) 030(4)(c)(ii) 030(5)(c)(ii)	Dissolved Oxygen Fresh water 200(1)(d)	Old guidance, considered outdated and proposal does not follow it.
Temperature 030(1)©(iv) 030(2)©(iv) 030(3)©(iv) 030(4)©(iii) 030(5)©(iv)	Temperature Fresh water 200(1)©	1972 Guidance—outdated, Region 10 Guidance not finalized
	Agriculture water supply for Fresh: Fresh water 200(3)(b): Electrical Conductivity=700us/cm Bicarbonate=339 mg/l Total Suspended Solids=75 mg/l	1972 Guidance for Irrigation water supply: Elec. Conductivity: no specific recommendation Bicarbonate-no specific recommendation TSS=No specific recommendation
Toxic narrative: 030(1)©(vii) 030(2)©(vii) 030(3)©(vii) 030(4)©(vi) 030(5)©(vii)	Toxic, radioactive & deleterious 260(a)	No change
Aesthetic narrative: 030(1)©(viii) 030(2)©(viii) 030(3)©(viii) 030(4)©(vii) 030(5)©(viii)	Aesthetic values 260(b)	No change
	Nonpoint source pollution 260©	
173-201A-030(6) Establishing lake nutrient criteria.	173-201A-230 Establishing lake nutrient criteria Same as 7/97	No Change

173-201A-040 Toxic substances.	173-201A-240 Toxic Substances Modified for Ammonia and minor edits	CFR 131.36-Toxics Criteria for those states not complying with CWA section 303(2)(b).
040(3)-Table of Toxic criteria	Table 240(1)(f) & (g) Ammonia equations modified	Partial change based on updated EPA guidance
173-201A-050 Radioactive substances.	173-201A-250 Radioactive substances. Same as 7/97	No change
173-201A-060 General considerations.	173-201A-260 Application of water quality criteria.	No substantive changes in this section—all parts moved to other sections
060(1)	<u>260(3)(c)</u>	No change
060(2)	260(e)(i)-(ii)	No change
060(3)	200(2)(b)(i)	No change
060(4)(a)-(c)	200(1)(f)(ii)-(iii)	No substantive change
060(5)	510(1)(a)-(b)	No substantive change
060(6)	<u>510(1)</u>	No substantive change
060(7)	<u>260(3)(g)</u>	No substantive change
060(8)	260(3)(h)	No substantive change
060(9)	200(1)(c)(vii)	No change
060(10)(a)-(c)	260(3)(i)(i)-(iii)	No change
070(2)	260(2)	Statement on natural conditions broadened to include human structural changes as determined consistent with 40 CFR 131.10(g)(3)&(4)
	260(3)(f)	New subsection for exempting human-created waters managed primarily for the removal or containment of pollution. Not federal requirement.
173-201A-070 Antidegradation.	173-201A-300 Purpose. 173-201A-310 Protection of Existing uses 173-201A-320 Protection of Waters with better water quality than the standards Modified	CFR 131.12-Antidegradation
173-201A-080 Outstanding resource waters.	173-201A-330 Protection of Outstanding National Resource Waters  Modified	CFR 131.12-Antidegradation
173-201A-100 Mixing zones.	<u>173-201A-</u> 400 Mixing zones. Same as 7/97	No change.
173-201A-110 Short-term modifications.	173-201A-410 Short-term modifications  Modified	No substantive changes
173-201A-040 (3) Table, Note dd.	173-201A-420 Water Effect Ratios.  New Section in Tools	No change from current standard
	173-201A-430 Water Quality Offsets	No federal requirement

	Now Continu	
	New Section	
	173-201A-440 Variances	Must comply with CFR 131.10(g)
	New Section	
	173-201A-450 Site Specific Criteria.	Must comply with CFR 131.10
	New Section	
	173-201A-460 Use Attainability Analysis.	Must comply with CFR 131.10
	New Section	
173-201A-120 General classifications.	Deleted.	No substantive change.
173-201A-130 Specific	173-201A-600 Table 602 Most Stringent Use	No required but must be consistent with CFR 131.10
classifications Freshwater.	Designations for Fresh Waters by Water Resource	·
	Inventory Area (WRIA)	
173-201A-140 Specific	173-201A-610 Table 612 Most Stringent Use	No required but must be consistent with CFR 131.10
classifications Marine water.	Designations for Marine Waters	'
	3	
173-201A-150 Achievement	173-201A-500 Achievement considerations.	No change
considerations.	Same as 7/97	3.
173-201A-160 Implementation.	173-201A-510 Means of Implementation.	No substantive change
	Modified	<b>3</b>
	510(5) Compliance schedules for dams	New subsection. No federal requirement.
173-201A-170 Surveillance.	173-201A-520 Monitoring and Compliance.	No change
<u> </u>	Same as 7/97	
<u>173-201A-180</u> Enforcement.	173-201A-530 Enforcement.	No change
170 20 17 100 Emorocinent.	Same as 7/97	110 onango
	Came as 1701	